AF/2685

IN THE U.S. PATENT AND TRADEMARK OFFICE

Appl. No.	:	09/622,468
Applicant	:	Salonaho et al.
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Title	:	MEASUREMENT REPORTING IN A TELECOMMUNICATION SYSTEM

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APPELLANT'S APPEAL BRIEF

Sir:

Commensurate with the NOTICE OF APPEAL filed on August 19th, 2004, Applicant/Appellant hereby submits this APPEAL BRIEF to the Board of Patent Appeals and Interferences (hereinafter, the Board) under 37 C.F.R. 1.192 and M.P.E.P. § 1206, and a draft for the $340 appeal brief fee set forth in 37 C.F.R. 1.17(c). This BRIEF is filed within two months from the filing date of the above-cited NOTICE and the undersigned representative believes that no late fee is due. However, should the undersigned attorney be mistaken, please consider this a petition for an extension of time under 37 C.F.R. § 1.136(a) or (b) that may be required to avoid dismissal of this appeal, and debit Deposit Account No. 50-1924 as appropriate.

(1) REAL PARTY IN INTEREST

The real party in interest (RPI) is Nokia Telecommunications Oy of Espoo, Finland, cited in both the parent PCT application and an assignment of the US application recorded on March 19, 2001.

(2) RELATED APPEALS AND INTERFERENCES

There are no other pending appeals or interferences of which the undersigned representative and assignee/RPI is aware that will directly affect, be directly affected by or have a bearing on the Board's decision in this appeal.

(3) STATUS OF CLAIMS

Claims 1-37 are pending in this appeal, and are reproduced in an Appendix accompanying this Brief as those claims stood finally rejected by an Office Action dated February 24, 2004.

This application entered the US national stage with thirty claims. In a preliminary amendment dated August 15, 2000, claims 2-4, 9,11-12, 15, 18-19, and 21 were amended to eliminate multiple dependencies. In response to an Office Action dated August 4, 2003, each of claims 1-30 were amended, and claims 31-37 were added. An Amendment After Final Rejection, dated July 26, 2004, made arguments but no claim amendments. The Applicant has not received a response to that Amendment After Final Rejection.

(4) STATUS OF AMENDMENTS

No amendment to the claims was proposed subsequent to the Final Rejection dated February 24th, 2004.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is in the context of a mobile communications environment wherein mobile stations (MSs) are in communication with a network, via base stations (BSs). To facilitate hand-offs of a particular MS from one BS to another, and for other reasons, the MS transmits to the network a measurement report with information about airlink quality.

The claimed subject matter relates to conditionally sending a measurement report from the MS. Specifically, at least two different triggering conditions are specified, preferably upper and lower thresholds for a measured parameter such as interference or received power of a beacon channel. A measurement report is sent from the MS to the network when at least one of the triggering conditions is met. In certain claims, the network sends the triggering conditions to the MS; in other claims, the MS independently determines them and the network sends the parameters to be measured that relate to the triggering conditions. Different sets of triggering conditions can be defined for the uplink and downlink direction, as well as a logical function for combining them. In claims reciting such a logical function, sending of the measurement report depends upon the condition of the logical function when actual measurements are applied against the triggering conditions (e.g., uplink condition satisfied AND downlink condition satisfied=send report). The network may dynamically define the triggering conditions. BSs may send offset values to the MS, which uses them to verify whether or not a triggering condition has been met.

Claims 26-30 and 32-37 include means plus function language. Of those, claims 30, 35 and 36 depend from claim 29 and further detail certain means recited in the parent claim 29. Claim 32 depends from claim 26 and further details one of the means in that parent claim

26. As such, support for the means pus function language of those claims lies within their parent claims, and will not be separately recited. Below are cited six clauses that represent the eleven distinct means plus function clauses of the claims. Following each clause is recited the relevant claims and page/line number where the written description/drawings support the clause, as required under the revised Appeal Brief format set forth in the Federal Register Vol. 69, No. 155, page 50006 et seq. (August 12, 2004).

- "means for determining a plurality of parameters/independent measurement report triggering conditions" as recited in network element claims 26 and 28 (parameters), network claim 33 (triggering conditions) network claim 27 (triggering conditions) and mobile station claim 29 (triggering conditions). Support for this clause may be found in the Application at page 8, line 29 [equation (2)], page 9, line 8 [equation (3)], page 17, lines 30-32, page 18, lines 30-32, and Figure 9 (networks) and Figure 10 (mobile station).

- "sending means" as recited in network claims 26-29, network element claim 33, and mobile station claim 34. Support for this clause may be found in the Application at page 18, lines 1-7, page 18, lines 36-37, and Figures 9-10.

- "receiving means configured to receive a plurality of parameters/independent measurement report triggering conditions" as recited in mobile station claims 29 and 37 (parameters), and in mobile station claim 34 (triggering conditions). Support for this clause may be found in the Application at page 18, lines 25-28 and Figure 10.

- "monitoring means for monitoring properties of a plurality of radio signals received from respective base stations" as recited in mobile station claims 29, 34, and 37. Support for this clause may be found in the Application at page 18, line 29 and Figure 10.

- "verifying means" as recited in mobile station claims 29, 34 and 37. Support for this clause may be found in the Application at page 18, lines 30-33 and Figure 10.

- "report means responsive to the verifying means for establishing a measurement report" as recited in mobile station claims 29 and 34. Support for this clause may be found in the Application at page 18, lines 34-35 and Figure 10.

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. The first grounds for rejection (Issue A) presented for review by the Board is whether reference WO 95/04419 to Cullen (hereinafter, Cullen) discloses a mobile station generating/sending a measurement report in response to satisfying one of a plurality of triggering conditions, as recited in each of claims 1-2, 4-6, 11, 21, 23, 25-29. Each of those claims stand rejected as anticipated by Cullen. Claims 1, 2, 11, 27, 28 and 29 are argued separately under Issue A and stand or fall alone.

B. The second issue (Issue B) presented for review by the Board is whether U.S. Patent No. 6,009,328 to Muszynski (hereinafter, Muszynski) and/or U.S. Patent No. 5,267,261 to Blakeney II et al. (hereinafter, Blakeney) teach or suggest, when combined with Cullen, a logical function for combining sets of trigger conditions, as recited in each of claims 12, 14-15 and 30. Claims 12 and 14-15 are rejected over the combination of Cullen and

Muszynski, whereas claim 30 is rejected over the combination of Cullen with Blakeney. Claims 12, 13, 14, 15, 18, 19, 20 and 30 are argued separately under Issue B and stand or fall alone.

C. The third issue (Issue C) presented for review by the Board is whether any combination of cited references, including Cullen, Muszynski, Blakeney, and Andersson (U.S. Patent No. 5,594,949), discloses a plurality of independent measurement report triggering conditions in a mobile station, as recited in independent claims 1, 2, 26, 27, 28, 29, and 34. Claims 1, 2, 12, 13, 26, 27, 28, 29, 30, 33, and 34 are argued separately under Issue C and stand or fall alone.

D. The fourth issue (Issue D) presented for review by the Board is whether the written description satisfies the first paragraph of 35, U.S.C. § 112 as to claims 31-37. All claims in this group are argued separately and stand or fall alone.

(7) ARGUMENT

ISSUE A: DOES CULLEN DISCLOSE A MOBILE STATION GENERATING OR SENDING A MEASUREMENT REPORT IN RESPONSE TO SATISFYING ONE OF A PLURALITY OF TRIGGERING CONDITIONS?

Claims 1-2, 4-6, 11, 21, 23, and 25-29 are evaluated with respect to the first grounds of rejection (Issue A).

Claim 1 is directed to a method and recites in relevant part:

"... a plurality of independent measurement report triggering conditions...;
...;
generating a measurement report ... at the mobile station when one of the triggering conditions has been met;"

CULLEN TEACHES MEASUREMENTS, NOT TRIGGER CONDITIONS.

The application at page 4, line 35 to page 5, line 5, recites that a threshold value is an example of a trigger condition. It distinguishes at page 6, lines 15-18 between an actual measurement value and a trigger condition, and relates that a type 1 report is sent if the trigger condition is met. Claim 1 similarly distinguishes between the triggering condition itself, and the condition being met. By the claims and the written description, the trigger condition is not the same as the measurement.

The Examiner asserts that Cullen's teaching at page 4, lines 28-30: "the process control unit 5 instructs the measurement units 4a, 4b, 4c, 4d to take measurements of link performance eg BER, C/I, received power level or bit rate", anticipates defining at least two sets of independent trigger conditions. No condition is seen here or elsewhere in Cullen; disclosed is a direction for the measuring units to measure and report, and sending the measurement is not conditional on a meeting a trigger condition. The teachings of Cullen relate to the measurements themselves, not to trigger conditions.

The distinction can be shown with BER, which is used as an example in both the present application and in Cullen. The application recites at page 9, lines 1-2, that a BER can be used *as a measure*. Subsequently at page 9, lines 17-19, the Application recites that "Having performed the measurements for this base station signal the MS checks whether a MEHO (Mobile Evaluated HandOver) report is to be transmitted according to the HO

algorithm ..."; and at lines 23-24 "The HO algorithm is used to trigger the transmission of the MEHO measurement report." One of the Cullen examples for a measurement of link performance is BER (page 4, lines 30). Both the application and Cullen use BER as an example of a measured parameter, yet the application distinguishes between the measured value of BER and a trigger condition. The Office Action refers to Cullen taking a measurement, and specifically to BER measurements, as anticipating the claim clauses referring to trigger conditions. But Cullen is not seen as applying an algorithm or any other trigger condition, only reporting the measurements when directed by the process control unit 5. The measured BER of Cullen cannot be interpreted as both a measured value and a trigger condition against which that value is applied: no disclosure in Cullen is seen to support such an interpretation.

CULLEN DOES NOT TEACH OR SUGGEST SENDING A MEASUREMENT REPORT IN RESPONSE TO SATISFYING A TRIGGER CONDITION.

Cullen fails to teach or suggest that a measurement report is sent in response to satisfying a trigger condition. Rather, Cullen is seen to teach at page 4, lines 28-32, that the collected data is sent to the base station, apparently in all instances. There appears no condition in Cullen by which a measurement is not sent. Contrary to the Cullen passage cited in the Office Action, It appears irrelevant whether or not the Cullen measurement unit can be configured to take different *measurements* as in Cullen, page 5, lines 10-12; the measurement (of whatever quality) appears to be sent in each and every instance. Even where Cullen describes comparing signal strengths at page 7, lines 26-32, it is the processor A' in the BSC base station controller that compares signal strengths of three BSs (4a-4c), giving the identity of the BS with the strongest signal. Determining which base station has the strongest signal does not appear (by Cullen's teaching) related to whether or

not the measurement is sent as in Issue A; Cullen discloses this as determinative of where it is sent, and there appears no instance in Cullen where a measurement is not sent. Further, Cullen fails even to disclose that this comparison is within the MS. In the claims rejected under Cullen alone, it is the mobile station that sends or does not send the measurement report, not (as it appears the Office Action construes Cullen) a particular base station that receives or does not receive a particular measurement.

One aspect of a trigger condition in Issue A is that there exist some provision whereby no measurement report will be sent. Cullen is not seen to teach or suggest such a provision. The measured BER of Cullen cannot be interpreted as both a measured value and a trigger condition against which that value is applied to determine whether or not to send a measurement report: to do so would compare the measured BER to itself. Since this would result in the supposed 'trigger condition' being met and the measurement report being consequently transmitted in each and every instance, such an interpretation reads the "trigger condition" language out of the claims. Sending of the report would then not be conditional on a trigger condition, but perfunctory as it is in Cullen.

Further, Cullen is seen to teach away from the mobile station conditionally sending a measurement report. Claims 1-2, 4-6, 11, 21, 23, and 25-29 (under Issue A) put the determination whether or not to send a measurement report in the mobile station. In contrast, Cullen is seen to teach that the mobile station sends measurements when directed by the base station, and does not appear to include teachings that the mobile station does anything other than respond in a non-discretionary manner. Cullen explicitly states that the BSC is the lowest possible level by which to exercise measurement collection control at page 5, lines 21-25, yet Cullen's own Figure 1 shows the MS 1 lower than the BSC 6.

All control in Cullen appears to reside at the BSC 6; the BS's 2a-2c and the mobile unit 1 merely take and send measurements as directed.

Claim 2 is directed to a method and recites in relevant part:

> "... sending by the network a plurality of independent measurement report triggering conditions for the mobile station,
> ...
> responsive to both the monitored radio signals and the triggering conditions, generating a measurement report comprising information about the monitored radio signals at the mobile station, and
> transmitting the generated measurement report to the network."

As argued above, Cullen is not seen to disclose a plurality of independent measuring report triggering conditions, and as related to claim 2, does not disclose sending by the network a plurality of independent measuring report triggering conditions.

Claim 11, which depends from claims 4 and 1, recites in relevant part:

> "wherein the one triggering condition comprises a threshold for the change of a radio parameter or a function thereof."

Cullen is also not seen to disclose that a triggering condition comprises a threshold for the change or a function thereof, but rather only that the requested measurement is sent.

Claim 26 is directed to a network and recites, in relevant part:

> "... a determining means for determining a plurality of parameters for a mobile station for use by the mobile station to determine a plurality of independent measurement report triggering conditions, and
> a sending means responsive to the determining means for sending the determined parameters to the mobile station."

As with method claim 2, Cullen is not seen to disclose a plurality of independent measuring report triggering conditions, and does not disclose a sending means responsive

to the determining means for sending to the mobile station a plurality of parameters for use by the mobile station to determine a plurality of independent measuring report triggering conditions. Claim 27 recites similarly, as does claim 28 for a network element.

Claim 29 is directed to a mobile station, and recites in relevant part:

> "... a receiving means configured to receive a plurality of parameters from the network,
> means for determining a plurality of independent measurement report triggering conditions using the received parameters,
> a monitoring means for monitoring properties of a plurality of radio signals received from respective base stations,
> a plurality of verifying means for verifying whether a measurement report triggering condition has been met,
> a plurality of report means responsive to the verifying means for establishing a measurement report comprising information about the monitored radio signals when one of the triggering conditions has been met, and
> a sending means for sending the measurement report to the network."

Cullen is not seen to teach that the parameters are sent to the mobile station, that the mobile station determines a plurality of independent measurement report triggering conditions using the received parameters, or that the mobile station sends a measurement report when one of the triggering conditions has been met. As detailed above, Cullen is seen to teach that the mobile station sends a measurement when directed by the network.

For at least the above reasons, claims 1-2, 4-6, 11, 21, 23, and 25-29 are seen to be novel over Cullen.

ISSUE B: DOES ANY COMBINATION OF CULLEN, MUSZYNSKI AND BLAKENEY TEACH OR SUGGEST A LOGICAL FUNCTION FOR COMBINING SETS OF TRIGGER CONDITIONS?

Claims 12-20 and 30 are evaluated with respect to the second grounds of rejection (Issue B). Claims 12, 13, 14, 15, 18, 19, 20 and 30 are argued separately. Claims 12-20 depend form method claim 1; claim 30 depends from claim 29, which is itself directed to a mobile station.

Claim 12 recites in relevant part:

> ...a logical function is defined for combining the first and the second set of triggering conditions, and
>
> at the mobile station, the state of each triggering condition is determined, the states combined using the logical function, and the measurement report is sent in dependence on the condition of the logical function;...

As detailed in the application (at page 11, line 36 to page 12, line 2), uplink and downlink trigger condition results (value of ULU and DLU) are combined using a logical function to make a decision whether or not to send a measurement report. Each of claims 12 and 30 explicitly recites uplink and downlink triggering conditions. Claims 13-20 depend from claim 12.

As above, Cullen is not seen to teach or suggest trigger conditions, and further is not seen to teach or suggest a logical function to combine them. The Office Action admits the latter at page 16, last paragraph. The Office Action cites to Muszynski at col. 9, lines 16-59.

Muszynski also teaches a measurement (signal to noise ratio or SNR) that relates to closed loop power control where individual MSs adjust transmit power in response to a power control command from the BS, a common closed loop power control setup for CDMA. The BS derives its power control command from SNR measured on the uplink. Muszynski

teaches at col. 2, lines 44-49, that sending the power control command is not conditional on the value of the SNR, and that power adjustment at the MS is not conditional on comparing the power control command to anything else. In each case, the actions in the MS are automatic and non-discretionary. Muszynski's description of a handoff between BSs under separate MSCs at col. 9 discloses the MS sending a pilot signal quality measurement (lines 20-22), the MS sending a handoff request (line 27), a BS determining if resources are available (lines 34-36), and various channel connection messages. A signal weakened below a threshold is disclosed at col. 10, line 2, and the only combining is seen at lines 43 and 61-62 as signal diversity combining for an inter-MSC handoff. As this is a soft handoff by BSs under control of different MSCs, the MS simultaneously receives signals from a losing and a gaining BS via legs 84 and 82 of Muszynski's Figure 1, respectively. The threshold that removes leg 84 at col. 10, lines 3-5 is not seen as relating to the sending or not sending of a measurement report; contact with the losing base station is severed, so no message or report needs to be sent; the signal is becoming too weak by passing under the threshold, and the losing BS is fully aware of the handover because it is soft and uses diversity signaling. More pertinent to Issue B, the signal diversity combining is overlapping signals from the losing and gaining BSs at the same MS; it is not a logical function for combining trigger conditions by which the sending or not sending of a measurement report depends.

Muszynski is therefore not seen to teach or suggest a logical function for combining sets of trigger conditions, and further is not seen to teach or suggest that the disclosed transmissions depend on a logical combination of sets of trigger conditions as recited in claims 12-20 and 30.

Of these claims, Blakeney is cited in the final Office Action against claims 18-20 and 30. Specifically, the Office Action cites to col. 28, lines 9-16 and recites "As interpreted by the Examiner, there are two different logical functions: one is to determine pilot signal falling below T_DROP and the other is to determine pilot signal rising above T_ADD, and thus two different trigger conditions." Assuming arguendo the Examiner's interpretation, T_DROP and T_ADD are admitted in the above statement as trigger conditions, and no teaching of Blakeney is seen to teach or suggest a logical combination of them.

In that same paragraph cited by the Examiner, Blakeney describes a situation where a mobile station is near a cell boundary, moving from a cell served by Base Stations A and B and toward a cell serviced by Base Station C. With respect to Base Station A, the mobile station detects a signal strength falling below T_DROP, and also a signal strength with respect to Base Station C rising above T_ADD. A pilot strength measurement message is generated and transmitted, the end result being that Base Station A is dropped and Base Station C is added to the active set of base stations for that mobile station.

But while two signal strength thresholds are crossed and a report is transmitted, its transmission is not dependent upon a logical combining of the thresholds; the report merely contains information concerning two signal strengths crossing two thresholds. That the mobile station simultaneously moves away from Base Station A and toward Base Station C does not render the sending of the report conditional on a logical function; Blakeley discloses no logical function. The simultaneous crossing of thresholds is happenstance, and Blakeney teaches that a report is sent when any threshold is crossed. That it may be sent with the crossing of one or simultaneous crossing of two thresholds does not make the sending conditional on a logical combination.

At col. 23, lines 14-18, Blakeney teaches that a pilot strength measurement message is sent when signal strength drops below T_DROP (for a prescribed period of time). At col. 26, lines 50-53, Blakeney teaches that a pilot strength measurement message is sent when signal strength increases above T_ADD. The teaching cited in the Office Action at col. 28, lines 9-16 merely addresses the situation where both thresholds happen to be crossed at the same time due to movement of the mobile station toward one base station and concurrently away from anther. If, for example, the two opposed thresholds were not crossed simultaneously but rather separated in time by two seconds, the Blakeney teachings at col. 23 and 26 make it clear that two pilot strength measurement messages would be sent, one for T_DROP and the other for T_ADD. While the content of the message may differ if one or two thresholds are crossed, a message is sent in each instance. There appears no motivation to modify Blakeney such that a threshold is crossed and NO message is sent, so the sending of the message is not dependent upon a logical combination of trigger conditions. As with Muszynski, Blakeney appears not to provide for a situation where the message is not sent, as the sending is not dependent upon a logical combination of sets of trigger conditions.

Claim 13 recites in relevant part:

> "...wherein the first and second set of triggering conditions are dynamically defined by the network."

As argued above, neither Cullen nor Muszynski teach or suggest trigger conditions. Blakeney does not teach or suggest sets of trigger conditions, or trigger conditions dynamically defined by the network. Whereas Cullen may teach that the network may define various parameters to measure, it is not seen as obvious to derive the network dynamically defining sets of triggering conditions from that limited teaching of Cullen.

Claim 14 recites in relevant part:

> "...wherein the logical function is defined by the network."

As with the above argument to claims 12 and 13, none of the references teach or suggest a logical function, and none further teach or suggest that it may be defined by the network.

Claim 15 recites in relevant part:

> "... a first combination of the first and second sets of triggering conditions and the logical functions are defined to be used for radio signals from or to active base stations having an active link with the mobile station,
> a second combination of the first and second sets of triggering conditions and the logical functions are defined to be used for radio signals from or to candidate base stations not having an active link with the mobile station,
> and at the mobile station, the first combination is used for radio signals from or to active base stations and the second combination is used for radio signals from or to candidate base stations."

No reference is seen to teach or suggest multiple combinations of triggering conditions, wherein one combination is for active base stations and another combination is for candidate base stations. Blakeney describes active and candidate base station sets, but no logical function related to either of them, and no combination of triggering conditions or logical functions specifically related to the active versus candidate sets.

Claim 18 recites in relevant part:

> "... two different logical functions are such that when a base station is in the active set, a measurement report is not triggered by a radio signal of that base station for the same set of radio properties as would trigger the transmission of a measurement report when the base station is in the candidate set."

No reference is seen to teach even one logical function, let alone the specific two logical functions of claim 18 that trigger differently whether the base station is in the candidate or active set.

Claim 19 recites in relevant part:

> "... defining a logical function for use when the number of base stations in the active set is equal to a predefined maximum number, and defining the first and second sets of triggering conditions on the basis of the radio signal properties of the active base station having the worst signal conditions, and wherein a measurement report is triggered by a radio signal of a candidate base station causes that worst base station to be replaced by the candidate base station."

Blakeney is the nearest reference, and is not seen to teach or suggest any logical function specifically for use when there are a predefined number of active base stations. While Blakeney does teach replacing an active base station with a candidate base station, it does not teach or suggest doing so triggering a measurement report by the signal of the replacing candidate base station.

Claim 20 depends from claims 19 and 1, and recites in relevant part:

> "...wherein the maximum number is dynamically defined by the network."

Blakeney is again the most relevant reference, and is not seen to teach dynamically defining a number of active base stations by the network, such that there is a logical function for combining sets of trigger conditions for the specific case in which the number of base stations in the active set equals the dynamically determined number. Cullen's teaching as to the network defining which parameters the mobile station is to measure is not seen as particularly relevant to the specific matter of claim 20.

Claim 30 is directed to a mobile station, depends from claim 29, and recites in relevant part:

> "... wherein the receiving means has been configured to receive at least a first and second different set of triggering conditions for uplink and downlink signals, and a logical function for combining these sets of triggers,
> ...; and
> the report means have been arranged to establish a measurement report to be sent by the sending means in dependence upon the condition of the logical function."

As argued with respect to method claim 12, no reference is seen to teach a logical function for combining sets of triggering conditions for uplink and downlink signals, nor for sending a report in dependence upon the condition of the logical function. They are not seen to teach any logical function, nor triggering conditions for uplink and downlink signals, nor sending a report conditional on their undisclosed logical function.

As neither Cullen, Muszynski, Blakeney, nor any combination of them teaches or suggests the substance of Issue B, each of claims 12-20 and 30 are asserted as novel and non-obvious over the combination.

ISSUE C: DOES ANY COMBINATION OF CULLEN, MUSZYNSKI, BLAKENEY, AND ANDERSSON TEACH OR SUGGEST A PLURALITY OF INDEPENDENT MEASUREMENT REPORT TRIGGERING CONDITIONS IN A MOBILE STATION?

Claims 1-36 are evaluated with respect to the third grounds of rejection (Issue C).

under Issue C. Of claims 1-36, claims 1, 2, 26, 27, 28, 29, and 34 are independent. In each claim of these claims, the independent measurement report triggering conditions are resident at some time in the mobile station. Claims 1, 2, 12, 13, 26, 27, 28, 29, 30, 33 and 34 are argued separately under this issue.

Claim 1 recites in relevant part:

> ...determining by the mobile station a plurality of independent measurement report triggering conditions using the network defined parameters,...

The Application teaches at page 11, lines 22-26, that uplink and downlink algorithms are inputted into the logical function, and a measurement report is sent from the mobile station if the function outputs a TRUE value. Thus, the independent measurement report triggering conditions in the mobile station are the uplink and downlink trigger conditions. At page 9, lines 3-5, it is disclosed that the mobile station receives from the base station the total interference power *on the uplink*, and the *uplink* offset value. At page 8, lines 26-32, it is disclosed that the mobile station determines downlink parameters from a measured signal, leaving the mobile station with measures on both uplink and downlink.

As recited above under Issue A, Cullen is seen to disclose only measurements, not trigger conditions. The Examiner asserts that "the process control unit 5 instructs the measurement units 4a, 4b, 4c, 4d to take measurements of link performance eg BER, C/I, received power level or bit rate" at Cullen, page 4, lines 28-30, anticipates defining at least two sets of independent trigger conditions. No condition is seen here or elsewhere in Cullen; it is a direction for the measuring units to measure and report, and is not conditional on a trigger condition. The teachings of Cullen relate to the measurements themselves.

As recited above under Issue B, Muszynski also teaches measurements and not trigger conditions. Specifically, Muszynski discloses (SNR) for closed loop power control where individual MSs adjust transmit power in response to a power control command from the BS.

This is a common closed loop power control architecture for CDMA systems. The BS derives its power control command from SNR measured on the uplink. Muszynski is not seen to teach a plurality of independent trigger conditions.

The Office action asserts that Muszynski teaches trigger conditions in the uplink and downlink directions that are indicative of signal quality. As recited at col. 2, lines 44-46 of Muszynski and referenced in the Office Action, "..., the BS measures the E_b/N_0 value, indicative of signal quality, from each MS CDMA uplink communication and subsequently transmits an appropriate power control command on the downlink communication channel to the MS, ...". This is an uplink measure of SNR, but the information is at the BS, not the MS. Further teachings at col. 8, lines 65-66 recite prior art transmission of pilot signals by the BS to the MS as a downlink signal quality reference. However, the text makes clear that this downlink signal is to be used as a reference. While the MS may use these references to determine downlink signal quality, there is no indication that the content of these downlink signals include information on uplink quality. Thus, Muszynski's SNR is indicative of uplink signal quality, but uplink quality information remains within the BS, whereas the pilot signal may be used to determine downlink signal quality and downlink quality information is within the MS. Because Muszynski does not teach that both uplink and downlink information are within the MS, it is not seen how the Muszynski MS can send or not send a report depending upon both uplink and downlink trigger conditions. No MS of Muszynski has information on uplink signal quality by which to evaluate against an uplink trigger condition. The power control command from the BS does not include information particular to the receiving MS's uplink signal quality; it is part of a closed loop power control regimen that evaluates all MS's in the BS's cell. Thus, Muszynski does not teach

uplink and downlink trigger conditions in the mobile station, or any other plurality of independent trigger conditions.

Andersson is cited for its teachings at col. 5, lines 18-22 and 37-42. These relate to mobile stations reporting interference information of the downlink channels. As with Muszynski, no teaching of Andersson is seen to teach or suggest that the mobile station has either information or trigger conditions relating to uplink signal quality, or any other independent trigger conditions that are independent. Therefore, Andersson also fails to teach or suggest a plurality of independent trigger conditions in the mobile station.

As recited above under Issue B, Blakeney teaches that a pilot strength measurement message is sent when signal strength drops below and/or increases above a threshold. Each of these are signal strengths on the downlink, and Blakeney is not seen to teach or suggest another trigger condition independent of downlink signal strength. Blakeney therefore also fails to teach or suggest a plurality of independent measurement report triggering conditions in the mobile station.

Whereas method claim 1 recites that the mobile station determines the plurality of independent measurement report triggering conditions, method claim 2 recites that the network send a plurality of independent measurement report triggering conditions for the mobile station. This aspect is distinct from claim 1, and further, the cited references, alone or in combination, are not seen to teach or suggest that the network send the triggering conditions.

Claim 26 is directed to a network element and claim 29 is directed to a mobile station. Claim 26 recites that the network element has determining means for determining a plurality of parameters for use by a mobile station to determine a plurality of independent measurement report triggering conditions, and sending means for sending the determined parameters to the mobile station. Claim 29 recites the mobile station has receiving means configured to receive a plurality of parameters from the network, and the mobile station further has means for determining a plurality of independent measurement report triggering conditions using the received parameters. No reference, alone or in combination, is seen to teach or suggest that the network determine and send parameters and the mobile station determine the plurality of triggering conditions.

Claims 27-28 and 33 are directed to a network and each recites that the network has determining means for determining a plurality of independent measurement report triggering conditions for use by a mobile station, and sending means for sending the determined triggering conditions to the mobile station. As with claim 2, no reference, alone or in combination, is seen to teach that the network determine the triggering conditions and send them to the mobile station.

Claim 34 is directed to a mobile station, and recites that the mobile station has receiving means configured to receive from the network a plurality of independent measurement report triggering conditions. No reference, alone or in combination, is seen to teach this aspect of claim 34.

Claims 12, 13 and 30 are also argued separately. The Application recites at page 10, lines 1-3: "For the thresholds 1 and 2, both the absolute and a relative threshold are defined.

Separate values can be defined for the uplink and the downlink directions." These are the disclosed *sets* of measurement report triggering conditions, both uplink and downlink. The argument above asserts that the references teach neither the broader aspect "plurality of independent triggering conditions" of claims 1 and 29, nor the narrower "uplink and downlink sets of measurement report triggering conditions" as specifically recited in claims 12 and 30. Claim 12 is directed to a method and depends from claim 1, whereas claim 30 is directed to a mobile station and depends from claim 29.

Claim 13 recites in relevant part:

> "...wherein the first and second set of triggering conditions are dynamically defined by the network."

As argued above, neither Cullen nor Muszynski teach or suggest trigger conditions. Blakeney does not teach or suggest sets of trigger conditions, or trigger conditions dynamically defined by the network. Whereas Cullen may teach that the network may define various parameters to measure, it is not seen as obvious to derive the network dynamically defining sets of triggering conditions from that limited teaching of Cullen.

Claim 30 is directed to a mobile station and further distinguished over claim 12. Claim 30 depends from claim 29 and recites in relevant part:

> "... wherein the receiving means has been configured to receive at least a first and second different set of triggering conditions for uplink and downlink signals,..."

As argued with respect to method claim 12, no reference is seen to teach or suggest that sets of triggering conditions for uplink and downlink signals, let alone that these sets are

received in the mobile station as recited in claim 30. As such, claim 30 is seen to patentably distinguish over the references, alone or in combination.

ISSUE D: ARE ANY OF CLAIMS 31-37 ENABLED BY THE WRITTEN DESCRIPTION SO AS TO SATISFY THE REQUIREMENTS OF 35 U.S.C. § 112, FIRST PARAGRAPH?

Claims 31-36 are evaluated with respect to the fourth grounds of rejection (Issue D), those claims being rejected under 35 U.S.C. § 112, first paragraph. As such, each of these claims stands or falls alone as to Issue D. The final Office Action does not detail as to whether claim clarity, enablement, or best mode is deemed insufficient. Therefore, the below argument presents the text of the written description (with one reference to a drawing figure) that supports the rejected claim. Should the Patent Office deem the below arguments not sufficiently detailed, the Applicant/Appellant requests a particularized reasoning for the rejection as to clarity, best mode, or enablement so that the Applicant/Appellant may respond in a more focused manner in a Reply Brief. Claim clauses are repeated below in italics, followed by the supporting text from the written description.

Claim 31: *A method according to claim 1, wherein the measurement report is generated when any one of the triggering conditions has been met.*

Support for the above may be found at the Application, page 5, lines 12-15: "For example, it may be determined whether the measurement report is to be sent when both the uplink and downlink conditions are met, when neither of them is met, when either of them is met, based entirely on the downlink condition or based entirely on the uplink condition." Claim

31 is asserted to comply with the 35 U.S.C. § 112 (first paragraph) requirements for clarity, best mode, and enablement in light of the written description cited above.

Claim 32. *A telecommunications network according to claim 26, wherein the determining means has been further arranged to define the activeness of respective triggering conditions, and the sending means has been arranged to send information about the activity state to the mobile station.*

Support for the above may be found at the Application, page 5, lines 3-8: "In response to having detected that the measured value has exceeded its upper threshold or gone under its lower threshold, the mobile station sends the network a measurement report.
According to a preferred embodiment, one or a plurality of the triggers can be inactivated by the network. However, at least one trigger must always be active."

And also at page 18, lines 17-19: "The determining means are preferably arranged to define the activity of respective trigger conditions, and the sending means are arranged to send this information to the mobile station."

Claim 32 is asserted to comply with the 35 U.S.C. § 112 (first paragraph) requirements for clarity, best mode, and enablement in light of the written description cited above.

Claim 33. *A network element for a telecommunication network for a telecommunication system comprising mobile stations and a network comprising base stations, in which system the mobile stations monitor the radio signals sent by base stations and handover decisions on establishing or cancelling a link between a mobile station and a base station are made in*

the network on the basis of measurement reports sent from the mobile station to the network, wherein the network element comprises:

determining means for determining a plurality of independent measurement report triggering conditions for a mobile station the triggering conditions being determined to be used together with monitored properties of radio signals corresponding to different base stations, and

sending means responsive to the determining means for sending the determined trigger conditions to the mobile station.

In addition to the support cited for claim 32 above, support for the "different base stations" portion of claim 33 may be found at the Application, page 6, lines 11-14: "The mobile station continuously measures the radio signals from the base stations in the neighborhood (G01). In these measurements, the mobile acquires information necessary to compare the measurement results to the triggers." Claim 33 is asserted to comply with the 35 U.S.C. § 112 (first paragraph) requirements for clarity, best mode, and enablement in light of the written description cited above.

Claim 34. *A mobile station for a telecommunication system comprising mobile stations and a network comprising base stations, in which system decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, wherein the mobile station comprises:*

receiving means configured to receive from the network a plurality of independent measurement report triggering conditions and to receive radio signals from a plurality of base stations,

monitoring means for monitoring the radio signals received from respective base stations,

a plurality of verifying means responsive to the receiving means and to the monitoring means and which have the functionality of verifying whether one of the measurement report triggering conditions has been met,

a plurality of report means for establishing a measurement report comprising information about the monitored radio signals, and

sending means for sending the measurement report to the network.

Support for claim 34 may be found with terminology very similar to that used in this claim, in the Application at page 18, lines 25-37. That portion of the Application further refers to Figure 10, which also enables the above claim. Claim 34 is asserted to comply with the 35 U.S.C. § 112 (first paragraph) requirements for clarity, best mode, and enablement in light of the written description cited above.

Claim 35. *A mobile station according to claim 29, wherein*

the receiving means receives from the network information indicating at least one triggering condition as active, the remaining report triggering conditions being inactive, and

the sending means transmits the generated measurement report if at least one active triggering condition has been met.

Support for the above may be found in the Application at page 5, lines 3-8 and 12-15, and at page 18, lines 17-19 as recited above with respect to claims 31-32. Claim 35 is asserted to

comply with the 35 U.S.C. § 112 (first paragraph) requirements for clarity, best mode, and enablement in light of the written description cited above.

Claim 36. *A mobile station according to claim 29, wherein*

the receiving means has been configured to receive base station specific offset values, and

the verifying means have been arranged to use the base station specific offset values in verifying whether a triggering condition has been met.

Support for the "offset value" aspects of claim 36 may be found in the Application at page 8, lines 17-18: "The MS is also to receive, e.g., on the beacon channel the DL offset value of BTS_i, ...". Each of equations [2] on page 8 and [3] on page 9 incorporate the relevant (uplink or downlink) offset value in the trigger condition. Claim 36 is asserted to comply with the 35 U.S.C. § 112 (first paragraph) requirements for clarity, best mode, and enablement in light of the written description cited above.

Claim 37. *A mobile station for a telecommunication system that includes mobile stations and a network comprising base stations, in which system decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, wherein the mobile station has*

receiving means for receiving parameters from the network for triggering the transmission of a measurement report and for receiving radio signals from a plurality of base stations,

monitoring means for monitoring properties of a plurality of radio signals received from respective base stations,

verifying means for calculating link quality measures for the base stations with an equation using the monitored properties of the radio signals and the received parameters, and

the verifying means being configured to determine using the calculated link quality measures whether a trigger condition for sending a measurement report is met.

The above "receiving means for receiving parameters from the network..." may be found in the Application at page 15, lines 24-25, where the parameters from the network include a periodic frequency T_report: "The transmission period is defined by the parameter T_report set by the network." All other claim clauses are supported by the passages cited above with respect to claims 31-36. Claim 37 is asserted to comply with the 35 U.S.C. § 112 (first paragraph) requirements for clarity, best mode, and enablement in light of the written description cited above.

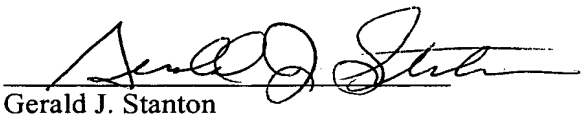
The above passages from the Application are seen to describe claims 31-37 with sufficient clarity to one of ordinary skill in the art. Best mode does not appear contested as the content of claims 31-37 is similar to other claims not rejected on similar grounds. It is thereby asserted that claims 31-37 satisfy all of the requirements of 35 U.S.C. § 112, first paragraph.

For at least the above reasons, the Applicant/Appellant contends that the combination of Cullen, Muszynski, Blakeney and Andersson do not render any of the claims obvious, and that each of claims 31-37 are fully enabled in the written description for one skilled in the

art, as required by 35 U.S.C. § 112, first paragraph. The Applicant/Appellant respectfully requests the Board reverse the final rejection in the Office Action of February 24th, 2004, and further that the Board rule that the pending claims are patentable over the cited art.

Respectfully submitted:

HARRINGTON & SMITH, LLP



October 18, 2004
Date

Gerald J. Stanton
Reg. No.: 46,008

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

October 18, 2004
Date

Ann Okrentowich

(9) APPENDIX

Listing of Claims:

1. (Previously Amended) A method of measurement reporting in a telecommunication system comprising mobile stations and a network comprising base stations, wherein handover decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, the method comprising:

defining by the network a plurality of parameters for the mobile station,

sending the parameters to the mobile station,

determining by the mobile station a plurality of independent measurement report triggering conditions using the network defined parameters,

monitoring at the mobile station properties of a plurality of radio signals received from respective base stations,

verifying by the mobile station whether a measurement report triggering condition has been met,

generating a measurement report comprising information about the monitored radio signals at the mobile station when one of the triggering conditions has been met, and

transmitting the generated measurement report to the network.

2. (Previously Amended) A method of measurement reporting in a telecommunication system comprising mobile stations and a network comprising base stations, wherein handover decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, the method comprising:

sending by the network a plurality of independent measurement report triggering conditions for the mobile station,

monitoring at the mobile station properties of a plurality of radio signals received from respective base stations,

responsive to both the monitored radio signals and the triggering conditions, generating a measurement report comprising information about the monitored radio signals at the mobile station, and

transmitting the generated measurement report to the network.

3. (Previously Amended) A method according to claim 1, wherein

the method further comprises a step of resetting a timer in connection with the step of transmitting a measurement report, and

one of the triggering conditions comprises a condition for the value of the timer.

4. (Previously Amended) A method according to claim 1, wherein one of the triggering conditions is a threshold for a radio signal parameter or a function thereof.

5. (Previously Amended) A method according to claim 4, wherein the radio signal parameter is the received power level of the signal or a function thereof.

6. (Previously Amended) A method according to claim 4, wherein in the radio signal parameter is the interference in the received radio signal or a function thereof.

7. (Previously Amended) A method according to claim 6, wherein the network uses CDMA air interface in which the connections are separated using different spreading codes, and

the value for the interference is an estimate for the interference power.

8. (Previously Amended) A method according to claim 1, wherein the method further comprises:

defining by the network the activeness of the measurement report triggering conditions so that at least one triggering condition is active and the remaining triggering conditions if any are inactive,

not performing the transmitting the generated measurement report in response to meeting an inactive triggering condition, and

performing the transmitting the generated measurement report if one active triggering condition has been met.

9. (Previously Amended) A method according to claim 4, wherein the method further comprises:

the mobile station receiving corresponding base station specific offset values from the base stations it monitors; and

using the base station specific offset values in the step of verifying by the mobile station whether a measurement report triggering condition has been met.

10. (Previously Amended) A method according to claim 9, wherein the offset value is dynamically defined by the network.

11. (Previously Amended) A method according to claim 4, wherein the one triggering condition comprises a threshold for the change of a radio parameter or a function thereof.

12. (Previously Amended) A method according to claim 4, wherein

a first set of triggering conditions is defined for the radio signals in the uplink direction and a second set of triggering conditions is defined for the radio signals in the downlink direction,

a logical function is defined for combining the first and the second set of triggering conditions, and

at the mobile station, the state of each triggering condition is determined, the states combined using the logical function, and the measurement report is sent in dependence on the condition of the logical function.

13. (Previously Amended) A method according to claim 12, wherein the first and second set of triggering conditions are dynamically defined by the network.

14. (Previously Amended) A method according to claim 12, wherein the logical function is defined by the network.

15. (Previously Amended) A method according to claim 12, wherein a first combination of the first and second sets of triggering conditions and the logical functions are defined to be used for radio signals from or to active base stations having an active link with the mobile station,

a second combination of the first and second sets of triggering conditions and the logical functions are defined to be used for radio signals from or to candidate base stations not having an active link with the mobile station,

and at the mobile station, the first combination is used for radio signals from or to active base stations and the second combination is used for radio signals from or to candidate base stations.

16. (Previously Amended) A method according to claim 15, further comprising creating an active link between the mobile station and a candidate base station not having an active link with the mobile station when the network receives from the mobile station a measurement report triggered by that candidate base station.

17. (Previously Amended) A method according to claim 15, further comprising deleting an active link between the mobile station and a base station when the network receives from the mobile station a measurement report triggered by that active base station.

18. (Previously Amended) A method according to claim 15, wherein said two different logical functions are such that when a base station is in the active set, a measurement report is not triggered by a radio signal of that base station for the same set of radio properties as would trigger the transmission of a measurement report when the base station is in the candidate set.

19. (Previously Amended) A method according to claim 12, further comprising defining a logical function for use when the number of base stations in the active set is equal to a predefined maximum number, and defining the first and second sets of triggering conditions on the basis of the radio signal properties of the active base station having the worst signal conditions, and wherein a measurement report is triggered by a radio signal of a candidate base station causes that worst base station to be replaced by the candidate base station.

20. (Previously Amended) A method according to claim 19, wherein the maximum number is dynamically defined by the network.

21. (Previously Amended) A method according to claim 1, wherein the network informs the mobile station what information to include in the measurement report, and the mobile station includes this information in the measurement report.

22. (Previously Amended) A method according to claim 21, wherein the radio signals are ordered using a predefined condition, and in the measurement report sent from the mobile station, information about the properties of a predefined number of the best radio signals according to the condition are reported.

23. (Previously Amended) A method according to claim 21, wherein the number of radio signals to be reported is given by the network.

24. (Previously Amended) A method according to claim 21, wherein the measurement report comprises a value for the path loss for a reported signal or a function thereof.

25. (Previously Amended) A method according to claim 21, wherein the measurement report comprises a value for the carrier to interference ratio of a reported signal or a function thereof.

26. (Previously Amended) A telecommunication network for a telecommunication system comprising mobile stations and the network comprising base stations, in which system the

mobile stations monitor radio signals sent by the base stations and handover decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, the network further comprising:

a determining means for determining a plurality of parameters for a mobile station for use by the mobile station to determine a plurality of independent measurement report triggering conditions, and

a sending means responsive to the determining means for sending the determined parameters to the mobile station.

27. (Previously Amended) A telecommunications network for a telecommunication system comprising mobile stations and the network comprising base stations, in which system the mobile stations monitor radio signals sent by the base stations and handover decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, wherein the network comprises:

determining means for determining a plurality of independent measurement report triggering conditions for use by a mobile station together with monitored radio signals of a plurality of base stations to trigger the transmission of a measurement report from a mobile station, and

sending means responsive to the determining means for sending the determined triggering conditions to the mobile station.

28. (Previously Amended) A network element for a telecommunication network for a telecommunication system comprising mobile stations and the network comprising base

stations, in which system the mobile stations monitor the radio signals sent by base stations and handover decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, wherein the network element comprises:

a determining means for determining a plurality of parameters for a mobile station for use by the mobile station to determine a plurality of independent measurement report triggering conditions, and

sending means responsive to the determining means for sending the determined parameters to the mobile station.

29. (Previously Amended) A mobile station for a telecommunication system comprising mobile stations and a network comprising base stations, in which system handover decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, wherein the mobile station comprises:

a receiving means configured to receive a plurality of parameters from the network,

means for determining a plurality of independent measurement report triggering conditions using the received parameters,

a monitoring means for monitoring properties of a plurality of radio signals received from respective base stations,

a plurality of verifying means for verifying whether a measurement report triggering condition has been met,

a plurality of report means responsive to the verifying means for establishing a measurement report comprising information about the monitored radio signals when one of the triggering conditions has been met, and

a sending means for sending the measurement report to the network.

30. (Previously Amended) A mobile station according to claim 29, wherein the receiving means has been configured to receive at least a first and second different set of triggering conditions for uplink and downlink signals, and a logical function for combining these sets of triggers,

the verifying means have been arranged to determine the states of each triggering condition and to combine the states according to the logical function, and

the report means have been arranged to establish a measurement report to be sent by the sending means in dependence upon the condition of the logical function.

31. (Previously Presented) A method according to claim 1, wherein the measurement report is generated when any one of the triggering conditions has been met.

32. (Previously Presented) A telecommunications network according to claim 26, wherein the determining means has been further arranged to define the activeness of respective triggering conditions, and the sending means has been arranged to send information about the activity state to the mobile station.

33. (Previously Presented) A network element for a telecommunication network for a telecommunication system comprising mobile stations and a network comprising base stations, in which system the mobile stations monitor the radio signals sent by base stations and handover decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, wherein the network element comprises:

determining means for determining a plurality of independent measurement report triggering conditions for a mobile station the triggering conditions being determined to be used together with monitored properties of radio signals corresponding to different base stations, and

sending means responsive to the determining means for sending the determined trigger conditions to the mobile station.

34. (Previously Presented) A mobile station for a telecommunication system comprising mobile stations and a network comprising base stations, in which system decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, wherein the mobile station comprises:

receiving means configured to receive from the network a plurality of independent measurement report triggering conditions and to receive radio signals from a plurality of base stations,

monitoring means for monitoring the radio signals received from respective base stations,

a plurality of verifying means responsive to the receiving means and to the monitoring means and which have the functionality of verifying whether one of the measurement report triggering conditions has been met,

a plurality of report means for establishing a measurement report comprising information about the monitored radio signals, and

sending means for sending the measurement report to the network.

35. (Previously Presented) A mobile station according to claim 29, wherein

the receiving means receives from the network information indicating at least one triggering condition as active, the remaining report triggering conditions being inactive, and

the sending means transmits the generated measurement report if at least one active triggering condition has been met.

36. (Previously Presented) A mobile station according to claim 29, wherein

the receiving means has been configured to receive base station specific offset values, and

the verifying means have been arranged to use the base station specific offset values in verifying whether a triggering condition has been met.

37. (Previously Presented) A mobile station for a telecommunication system that includes mobile stations and a network comprising base stations, in which system decisions on establishing or cancelling a link between a mobile station and a base station are made in the network on the basis of measurement reports sent from the mobile station to the network, wherein the mobile station has

receiving means for receiving parameters from the network for triggering the transmission of a measurement report and for receiving radio signals from a plurality of base stations,

monitoring means for monitoring properties of a plurality of radio signals received from respective base stations,

verifying means for calculating link quality measures for the base stations with an equation using the monitored properties of the radio signals and the received parameters, and

the verifying means being configured to determine using the calculated link quality measures whether a trigger condition for sending a measurement report is met.

END OF CLAIMS